

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. to 5. (Canceled)

6. (Original) A vital signs processing apparatus comprising:

vital signs detecting means of detecting vital signs; and

vital signs processing means of processing, storing, and displaying said vital signs detected by said vital signs detecting means; wherein:

said vital signs detecting means comprises at least:

buffering means of temporarily storing said detected vital signs; and

first communicating means of communicating with said vital signs processing means;

said vital signs processing means comprises at least:

second communicating means of communicating with said vital signs detecting means;

storing means of storing said vital signs;

processing means of processing said vital signs stored in said storing means according to a predetermined program and/or data; and

displaying means of displaying said vital signs stored in said storing means and/or output data of said processing means.

7. (Original) The vital signs processing apparatus according to Claim 6 wherein said vital signs processing means further comprises third communicating means of communicating with an external server.

8. (Original) The vital signs processing apparatus according to Claim 6 wherein:

said buffering means and said storing means comprise a removable medium which can be detached; and

said removable medium is transferred between said vital signs detecting means and said vital signs processing means, whereby the data stored in said removable medium is transferred.

9. (Original) The vital signs processing apparatus according to any of Claims 6-8, wherein:

said vital signs detecting means is composed of a pulse wave sensor for measuring the pulse wave of a user; and

said processing means comprises: frequency processing means of performing FFT (fast Fourier transformation) processing onto the frequency of said pulse wave; heart rate measuring means of measuring heart rate from the output of said frequency processing means; and calorie consumption calculating means of calculating calorie consumption from said heart rate.

10. (Original) The vital signs processing apparatus according to Claim 9 wherein:

said vital signs processing means further comprises FFT processing means of performing FFT processing onto said heart rate;

according to the result of said FFT processing, it is determined whether said user is exercising or not; and

when it is determined that said user is not exercising, and when said heart rate exceeds a predetermined set value, said calorie consumption calculating means does not use said measured heart rate, but calculates calorie consumption according to said user's resting heart rate stored previously.

11. (Original) The vital signs processing apparatus according to Claim 9 further comprising inputting means of permitting a user to input: personal data including one's name, age, and sex; health control indices including daily, weekly, monthly, and final target values for calorie consumption; and exercise indices including upper and lower limits for heart rate at exercise, and exercise time.

12. (Original) The vital signs processing apparatus according to Claim 11 wherein said health control indices and said exercise indices are displayed on said displaying means.

13. (Original) The vital signs processing apparatus according to Claim 9 further comprising notifying means of warning said user when said heart rate falls outside the range between said upper and lower limits for heart rate having been input through said inputting means.

14. (Original) The vital signs processing apparatus according to Claim 11 wherein:

said processing means performs: the accumulation of said calorie consumption; the calculation of the difference from said target value; the calculation of the degree of achievement to said target value; and the calculation of the expected time of achieving said target value at the current pace of calorie consumption; and then stores these data in a region different from that of said vital signs data, within said storing means; and

said displaying means displays: the time series of the change in said heart rate and said calorie consumption; said accumulated value of calorie consumption; and said expected time of achieving said target value.

15. (Previously Presented) The vital signs processing apparatus according to Claim 6 wherein:

said vital signs detecting means is used as said detecting means connected to said terminal.

16. (Previously Presented) The vital signs processing apparatus according to Claim 6 wherein said vital signs detecting means and said vital signs processing means are used as said detecting means connected to said terminal.

17. (Currently Amended) A health control method wherein a vital signs processing apparatus according to any of Claims 7, 5, 15 or 16 is used, whereby the health of a user of said vital signs processing apparatus is controlled according to instructions from a health control instructor who is a server user of said information server or said server, wherein

said method comprises:

a first step in which said information server or said server generates a health control program including all or part of the exercise indices, the exercise menu, and the health control indices of said user of said health vital signs processing apparatus according to a user chart containing vital signs including the height, the weight, the body fat percentage, and the

temperature of said user, and then transmits said program to said vital signs processing apparatus;

a second step in which said vital signs processing apparatus receives said health control program, and in which said user uses said vital signs processing apparatus in accordance with said health control program, and thereby acquires said user's vital signs;

a third step in which said information server or said server renews said health control program according to said acquired measurement data; and

a fourth step in which when said measurement data falls outside the range of the values set in said health control program, said vital signs processing apparatus transmits warning information for requesting attention to said information server or said server; and wherein:

on recognizing said warning information, said health control instructor determines and alters said exercise indices and/or said exercise menu in said health control program according to said warning information;

said information server or said server transmits said altered exercise indices and/or exercise menu to said vital signs processing apparatus; and

when said vital signs processing apparatus receives said altered exercise indices and/or exercise menu, said user takes exercise according to said exercise indices and/or exercise menu.

18. (Original) The health control method according to Claim 17 wherein:

said vital signs processing apparatus transmits prompt information for requesting the renewal of said measurement data, to said user;

on recognizing said prompt information, said user determines and operates said vital signs processing apparatus according to said prompt information; and

said vital signs processing apparatus acquires new measurement data, and then transmits them to said information server or said server.

19. (Original) The health control method according to Claim 17 wherein:

said information server or said server transmits prompt information for requesting the renewal of said acquired measurement data, to said user;

on recognizing said prompt information, said user of said vital signs processing apparatus determines and operates said information server or said server according said prompt information; and

on receiving new measurement data, said information server or said server generates a new health control program based on said data.

20. (Previously Presented) The health control method according to Claim 18 wherein said prompt information is output when said measurement data is not renewed for a predetermined time or longer.

21. (Original) The health control method according to Claim 18 wherein said prompt information includes the method of operation of said vital signs processing apparatus for said user to renew said measurement data.

22. (Original) The health control method according to Claim 19 wherein said prompt information includes the operation method of said information server or said server for said user of said vital sign processing apparatus.

23. (Original) The health control method according to Claim 17 wherein:

said information server or said server further comprises a user ID (identifier) table for storing user IDs for corresponding the user chart of each user to that user uniquely; and

said user ID is transmitted together with said health control program to said health control apparatus.

24. to 27. (Canceled)

28. (Original) A program of operating a computer as all or part of said processing means of said vital signs processing means of said vital signs processing apparatus according to Claim 6.

29. (Original) A program of operating a computer to carry out all or part of said first, second, third, and fourth steps in said health control method according to Claim 17.

30. (Original) Data structure which can be used in a computer and comprises all or part of the data structure in said first, second, third, and fourth steps in said health control method according to Claim 17.

31. to 51. (Canceled)

52. (New) The vital signs processing apparatus of claim 7 wherein the server includes:

means determining whether the detected vital signs, received from the vital signs processing means via the third communicating means, are within a predetermined range for a user, and

changing the predetermined program and/or data, and transferring the changed program and/or data to the vital signs processing means via the third communicating means, when the detected vital signs are determined to be outside of the predetermined range for the user.

53. (New) The vital sign detection method of claim 52 wherein the server includes means changing the predetermined program and/or data based on judging the received detected vital signs.

Respectfully submitted,

RatnerPrestia



Allan Ratner, Reg. No. 19,717
Attorney for Applicant

AR/kc

Dated: September 10, 2003

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

The Commissioner for Patents is hereby
authorized to charge any additional fees/credit
any overpayment of fees associated with this
communication to Deposit Account No. **18-0350**.

EXPRESS MAIL Mailing Label Number: EV 351885984 US
Date of Deposit: September 10, 2003

I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.



Kathleen Libby